

## ARMY PUBLIC AFFAIRS PRESS RELEASE (NOV. 19, 2003)

### ARMY BUSINESS INITIATIVES SAVE TIME AND MONEY

**T**he Acting Secretary of the Army, R.L. Brownlee, has approved 13 new business initiatives as part of the Army Business Initiatives Council (ABIC), a process designed to identify and implement business reform actions.

The approved Army initiatives include a variety of cost-cutting and quality enhancing measures, to include:

- Shortening force modernization processes to speed the fielding of new systems.
- Exploring ways to reduce costs of construction equipment.
- Reducing the cost and time needed to reverse engineer obsolete parts.
- Standardizing the acquisition reporting process.
- Simplifying the process for securing approval for needed changes and improvements to the Army's 4,500 historic barracks.

Additionally, on Oct. 1, 2003, the Army became the executive agent for administration of the Department of Defense (DoD) Business Initiatives Council (BIC), which was transferred from the Air Force. That responsibility is shared among the services on a six-month rotational basis to help assure commitment and participation.

The DoD BIC was formally created in 2001 by Secretary of Defense Donald Rumsfeld and both the Army and DoD councils focus on identifying ways to streamline stringent requirements, cumbersome directives, and lengthy staffing processes.

Of the 13 approved initiatives, 10 are Army only and the other three are recommended for submission to the DoD BIC for review, as they may have benefits that could be extended across all the military services. To date the Secretary of the Army has approved a total of 79 ABIC initiatives. A complete list of the Army approved initiatives can be found at <http://www.asafm.army.mil/bic.asp> > .

In addition to focusing on cost savings and cost avoidances, the ABIC looks for initiatives which streamline processes and procedures in order to reduce cycle times and use soldiers' and civilians' time more efficiently.

"These initiatives continue to focus on key areas in need of improvement, such as reducing cycle time, shorten-

ing processes, and reducing costs," said Mr. Don Tison, the executive director of the Army BIC.

Tison added that a major benefit of the Army BIC program is that money saved from an approved initiative goes right back to the organization that submitted it.

"This is a great program and, with increased participation, we'll continue to improve the Army's business practices, allowing us to redirect the time and money saved to more critical needs," said Tison.

This round marks the sixth time that the Army BIC has met since 8 May 2002.

## AMERICAN FORCES PRESS SERVICE (NOV. 21, 2003)

### NEW PROTECTION AHEAD IN HELMETS, BODY ARMOR

*Donna Miles*

**W**ASHINGTON (AFPN)—New, reinforced helmets and body armor currently being fielded to the military represent just the tip of the iceberg in terms of what is on the drawing board for protecting warfighters of the future.

The future fighting force will have far superior protective systems that provide enhanced capabilities while imposing less weight on the user, said officials from U.S. Army Soldier Systems Center at Natick, Mass. The center conducts research and product development for all the military services.

Engineers are looking at new materials and composites that offer enhanced protection with less weight, said Robert Kinney, director of Natick's Individual Protection Directorate.

The Marine Corps is fielding a new helmet that, thanks to new materials, offers 6 percent more fragmentation protection and the ability to stop 9 mm rounds, Natick officials said. The helmet, weighing a little more than 3 pounds, [weighs] about a half-pound less than the previous Kevlar helmet, introduced in the early 1980s.

A similar but somewhat streamlined helmet developed by the Army for special operations forces, the modular integrated communication helmet also provides increased ballistic protection. Army officials have expressed "tremendous interest" in fielding the new helmet to other forward-deployed troops, Kinney said.

## IN THE NEWS

Looking a decade down the road, warfighters' helmets are expected to become even more impenetrable to enemy rounds, while offering an array of added protections.

The objective force warrior program integrates thermal sensors, video cameras, and chemical and biological sensors within the helmet. It also includes a visor that can act as a "heads-up display monitor" equivalent to two 17-inch computer monitors in front of the wearer's eyes, said LeeAnn Barkhouse, a business liaison for the program. The program is a "system of systems" the Army is developing for warfighters in 2010 and beyond, she said.

New technology is also improving warfighters' body-armor systems, Natick officials said. The new Interceptor body-armor system is in wide use by soldiers and Marines in Afghanistan and Iraq, where it "is saving lives left and right," Kinney said.

The vest, which the Marine Corps began fielding in late 1999, includes two 4-pound inserts that protect the vital

organs against 9 mm submachine-gun fire at point-blank range, said Dee Townes, project officer for Natick's Marine Corps team. The vest also includes removable flaps that cover the groin, throat, and neck.

Lightweight boron-carbide protective plates make the Interceptor weigh a little more than 16 pounds, compared to 25 pounds for the flak jacket, the previous body armor.

But Natick officials are exploring different materials and composites of materials that will provide increased ballistic protection while shedding as many as 6 more pounds from the vest, Kinney said.

"Sixteen pounds is still too heavy," he said. "Our goal is to get a one-third to one-half reduction in weight. If we can get under 10 pounds, that would [be] more reasonable."

The body-armor system being developed for the objective force warrior program incorporates next-generation

Dutch DeGay, a project engineer for the Objective Force Warrior program, briefs reporters on the Army's prototype combat uniform in the Pentagon on May 23, 2002. The helmet incorporates infrared thermal, day/night video cameras, chem-bio sensors, a global positioning system, broadcast heads-up display, and ballistic protection. The torso garment incorporates body armor and has physiological status monitors that allows the individual soldier, as well as the medics on the battlefield, to know exactly what the individual soldier's physical condition is at any given time. The uniform is suitable for all climate conditions, having the capability of being heated or cooled. The combat uniform is being researched and developed at the U.S. Army's Soldier Systems Center, Natick, Mass. DoD photo by R. D. Ward



boron-carbide ceramic plates that will weigh 10 to 30 percent less than those in the Interceptor, while delivering equal or greater protection.

New construction processes are being explored to shape the plates so they fit more snugly against the chest and spine, said Dutch DeGay, equipment specialist for the program.

Natick officials also plan to replace the 20-plus layers of Kevlar in the Interceptor vest with a new M-5 fiber that will weigh about one-third less, he said.

The self-adjusting vest will position the protective plates about 2 inches from the torso, DeGay said, to reduce chest injuries or bruising in the event that the wearer takes a hit.

"Our goal is to create a protective system that is lower profile, lower bulk, and lower weight," he said. "We want it to be like a second skin, so the warfighter barely even knows that it's there, but that offers the protections needed in a combat environment."

December 3, 2003

## HEADQUARTERS MARINE CORPS/ NAVAL AIR SYSTEMS COMMAND (DEC. 3, 2003)

### V-22 OSPREY REACHES 1,000-HOUR MILESTONE

Ward Carroll

**P**atuxent River, MD—The V-22 recently surpassed 1,000 flight hours flown since the Osprey's return to flight in May '02. Osprey No. 24 got the program past the mark during an icing test flight over Nova Scotia, where a V-22 Integrated Test Team detachment is currently based for the first half of the icing portion of the test plan.

"It's fitting that this milestone was reached by Osprey No. 24 on our crucial icing detachment in Canada," said Air Force Col. Craig Olson, V-22 Joint Program Manager. "We've accomplished what we'd intended at this point since the return to flight, and that is truly a reflection of the teamwork between the program office and integrated test team."

"This milestone represents a year and a half of hard work, successful testing, and mishap-free flying," said Kevin Morgan, V-22 Contractor Flight Test Director. "We've accomplished a lot over the last eighteen months. I couldn't be more proud of the folks at Pax, Edwards,

and New River, and our industry partners at the sites. A lot of people came together to make this milestone happen."

Since the V-22 program's return to flight, the Osprey has gone through exhaustive developmental testing, highlighted by two at-sea periods and a battery of high rate of descent tests that clearly defined the airplane's robust operating envelope and led to Tom Macdonald, the chief corporate test pilot, receiving the Society of Experimental Test Pilot's prestigious Iven C. Kincheloe award. Additionally, the program received important shows of confidence from Department of Defense leadership during the two most recent defense acquisitions boards held at the Pentagon. In the coming months, the program will be focusing on other facets of developmental testing as well as supporting VMX-22, the tiltrotor test and evaluation squadron based at MCAS New River, North Carolina, as it prepares for the Osprey's operational evaluation next year and eventual fleet introduction of the aircraft.

## HEADQUARTERS MARINE CORPS/ MARINE CORPS SYSTEMS COMMAND (DEC. 3, 2003)

### FUTURE AND PRESENT MEET IN UNMANNED GROUND VEHICLES

Capt. Chad Walton, USMC

**M**ARINE CORPS BASE QUANTICO, Va.—Science fiction movies have long used robots as a staple of their regular cast, but even now the Marine Corps is working on a machine that will operate forward of the front lines and provide scouting, flank security, direct attack, and other tasks that will decrease risks for combat Marines.

The Tactical Unmanned Ground Vehicle, or Gladiator, is designed to support dismounted infantry and combat engineers during the performance of their mission, across the spectrum of conflict and range of military operations. The Gladiator will provide the Marine Corps' Ground Combat Element with an unmanned tele-operated/semi-autonomous ground vehicle for remoting combat tasks in order to reduce risk to the warfighter and neutralize threats to the Marine Air-Ground Task Force.

"This system is not intended to replace Marines," said Larry Hennebeck, the Project Officer, who works at Robotic Systems Joint Project Office in Redstone Arsenal, Ala. "The Gladiator will give commanders another alternative to sending out Marines on missions that are very dangerous."

The Gladiator will be capable of performing scouting, surveillance, and target acquisition; direct fire; bunker/light-armor destruction; obstacle breaching; nuclear, biological, and chemical (NBC) reconnaissance; employment of non-lethal weapons; obscurant delivery; engineer reconnaissance; and transporting of ammunition or equipment.

The Gladiator will possess day and night video cameras capable of performing as well as an individual Marine with currently fielded binoculars and thermal imaging equipment; an integrated position locating system and laser rangefinder capable of accurately determining the location of targets; acoustic detection system; and anti-tampering/handling devices.

The operator will direct the Gladiator TUGV from a hand-held unit that controls the various platform/payloads and data reception from the sensors. This will provide the Gladiator with tele-operational capability for remote command and control of the vehicle as well as data display, storage and dissemination.

The Gladiator system will use a modular, plug-and-fight configuration and will be capable of remotely employing a variety of equipment already fielded to infantry and combat engineer units. This equipment includes the Anti-Personnel/Obstacle Breaching System, M240G Medium Machine Gun, M249 Squad Automatic Weapon, Shoulder-Launched Multipurpose Assault Weapon, Light Vehicle Obscuration Smoke System, Automatic Chemical Agent Detection Alarm, AN/VDR-2 Nuclear Detection System, Multipurpose Cart, etc.

"The Gladiator will significantly enhance the ability of Marines to accomplish assigned mission tasks," said Capt. Robert Parks, the Requirement Officer for the system.

During recent Field User Evaluations by 1st Battalion, 2D Marines held at Camp Lejeune, N.C., the Gladiator had a chance to prove its worth. "The Marines were surprised at the numerous ways the system could be used to enhance tactical level operations," said Hennebeck. The Marines of 1/2 will be employing the systems during CAX 3-04 in January.



The Tactical Unmanned Ground Vehicle will fulfill many dangerous missions that can reduce the danger to Marines in some combat situations.

Photo courtesy Marine Corps Systems Command

This system will increase MAGTF capabilities by:

- Reducing Marine casualties by remotizing combat tasks and minimizing risks to individual Marines by eliminating or reducing their exposure to enemy fires, booby traps, or NBC agents.
- Significantly enhancing the ability of tactical commanders to detect, identify, locate, and neutralize a variety of threats to include enemy force activity, chemical and biological agents, and impassible terrain or unusable routes.
- Providing tactical commanders with real-time combat information, enabling real-time maneuver decision-making at the platoon/company level.
- Increasing our ability to operate at a higher tempo due to the increased speed at which we can conduct operations such as obstacle breaching, patrolling, reconnaissance by force, NBC & Engineer reconnaissance, etc.
- Increasing force lethality by being able to acquire and engage the enemy at extended ranges.
- Maximizing Economy of Force efforts by requiring fewer personnel to conduct combat tasks, conserving Marines' strength, and reducing risks in secondary areas/efforts. In this capacity the system will serve as a force multiplier.



**DEPARTMENT OF DEFENSE NEWS  
RELEASE (DEC. 9, 2003)  
MISSILE DEFENSE AGENCY CHOOSES  
MISSILE TARGET CONTRACTOR**

**T**he Department of Defense announced today that the Missile Defense Agency (MDA) has awarded a combination cost-plus-award-fee and indefinite-delivery/indefinite-quantity contract to Lockheed Martin Space Systems Co., Denver, Colo., for the MDA Targets and Countermeasures Program. The amount awarded today is \$210 million to perform target system engineering, design, and management with a period of performance from December 2003 to December 2007. The contract has a potential period of performance of 10 years and contract value of \$4.6 billion if all options are exercised.

The contract awarded today will provide capability-based targets and countermeasures used to develop, test, and verify ballistic missile defense system performance. These targets allow testing of the missile defense technologies now in development to intercept and destroy incoming ballistic missiles during various times in flight, including the Airborne Laser, the Kinetic Energy Interceptor, the Ground-based Midcourse Defense, the Aegis Ballistic Missile Defense, the Patriot Advanced Capability 3, and the Theater High Altitude Area Defense (THAAD).

Targets and countermeasures will be developed to represent capabilities of ballistic missile threats of the type that could be used in an attack on the United States, our deployed forces and our friends and allies. Due to the technical advances that are sure to be part of ballistic missile proliferation worldwide, it is vital that the United States conduct ground and flight tests against these targets and countermeasures to ensure our missile defense technologies stay ahead of those of our adversaries.

*(News media point of contact is Rick Lehner, Missile Defense Agency, (703) 697-8997.)*

**AIR FORCE PRINT NEWS (DEC. 11, 2003)  
OFFICIALS ANNOUNCE EELV  
CONTRACT AWARD**

**W**ASHINGTON (AFPN)—Air Force officials announced Dec. 10 a contract award to Lockheed Martin International Launch Services for the purchase of one Atlas V Evolved Expendable Launch Vehicle (EELV). The vehicle will launch a National Reconnaissance Office payload from Cape Canaveral Air Force Station, Fla., in 2006.

This was a sole-source contract award to Lockheed Martin, officials said. The Boeing Company was ineligible to compete. Three Boeing integrated defense business units are currently under suspension from competing for government launch contracts.

"This (EELV) will launch a critical national security space capability that will provide information this nation's leaders and warfighters so critically need," said Peter B. Teets. He is the undersecretary of the Air Force and the National Reconnaissance Office director.

The Lockheed Martin Atlas V and Boeing Delta IV are the two families of EELVs developed with the Air Force to modernize and reduce the cost of the nation's space-lift operations while providing the United States with assured access to space, officials said.

**AIR FORCE PRINT NEWS (DEC. 17, 2003)  
REPLACEMENTS SOUGHT FOR AGING  
HELICOPTERS**

*Staff Sgt. Melanie Streeter, USAF*

**W**ASHINGTON—An aging fleet of combat search and rescue helicopters is leading Air Force officials on a quest for a new personnel recovery vehicle.

The HH-60G Pave Hawks that comprise the Combat Search and Rescue (CSAR) helicopter fleet are 14 years old on average. The oldest are 23 years old and have surpassed the 7,000 flying-hour mark. The aging aircraft cannot meet mission requirements, officials said.

"We have some requirements that the HH-60G does not meet," said Lt. Col. Griffith Massey, Air Force chief of CSAR and special operations forces requirements. "The six main areas are speed, range, cabin space, survivability, battlespace awareness, and all-weather operability.

"In addition, the aircraft are aging," Massey said. "They are beginning to cost us significantly more money in terms of maintenance and the manpower to work on them to keep them flying."

A mission needs statement approved by the Joint Requirements Oversight Council (JROC) raised these issues in 1999. It set the stage for acquiring a replacement for the Pave Hawks—the personnel recovery vehicle, or PRV.

A study was conducted, followed by the development of the PRV operational requirements document. The document is now awaiting council approval.

"(The document) at the JROC is a critical step on the timeline," Massey said. "It's required for us to move to the next step."

Though the change will not happen overnight, it is on the horizon, officials said.

"It's something the Air Force has a requirement for and a basic acquisition plan to get to," Massey said. "When we get initial funding, we'll set up a system program office to make this requirement an acquisition program."

The office may be in place as early as the end of fiscal 2004. Initial funding for research and development of the PRV is slated to start in fiscal 2005.

"And then we're looking at source selection, in other words, competition, in the fiscal 2006 timeframe in order to have the contract awarded by the end of 2006, if possible," Massey said.

Several helicopter manufacturers have expressed interest, officials said.

"Eventually, in the fiscal 2012 timeframe, we (will) get the first production deliveries," Massey said. "We're looking for (initial operational capability) in fiscal 2014."

The PRV process may also reveal additional benefits, such as a common helicopter to suit all Air Force requirements.

"Air Combat Command (ACC officials) did a study to determine whether or not a common-helicopter concept would be cost effective and what synergy would come from replacing the UH-1 (Huey) helicopters with something like the PRV," Massey said.

The ACC study found savings of more than \$600 million by using the common-helicopter concept.

Other efficiencies in training and maintenance were also discovered, said Lt. Col. Darryl Blan, Air Force operational training branch chief. By changing from different helicopters to one common airframe modified to fit mission requirements, many training obstacles vanish.

When pilots and maintainers want to change airframes, they must attend formal training for each airframe. With the one-airframe concept, that requirement goes away and the mission-unique training could be accomplished at the operational unit.

The development of a common Air Force helicopter would be a first for the Service. The current fleets of Pave Hawks and Hueys are modifications of helicopters developed for the Army.

### DEPARTMENT OF DEFENSE NEWS RELEASE (DEC. 17, 2003) **DOD LAUNCHES NEW WEB SITE FOCUSING ON TRANSFORMATION**

**W**ASHINGTON—Defense officials continue to improve their public face on the World Wide Web. Beginning today, DoD has a new Web site focused on transformation.

The new site has the same look and feel as the DoD homepage, but concentrates on news in the transformation arena.

"This is another next step in our effort to focus more attention on the Defense Department's priorities," said Chris Willcox, deputy assistant secretary of defense for public liaison. "The first step occurred in October 2001 when DoD introduced its DefendAmerica Web site detailing U.S. efforts in the war on terrorism. The next step came this June when DoD revamped its home page."

Willcox said transformation is so vital to DoD's efforts in the global war on terrorism, as well the department's future in general, it's important to have a separate, focused site.

"There is a lot transformation news out there right now, but it's scattered, and people interested in the topic have to surf many sites to get the total picture. Our goal is to provide that total picture and highlight specific areas in the transformation arena."

Harold Heilsnis, DoD Public Affairs' interim director for Internet operations, explained that the transformation site will highlight the broad range of initiatives in the transformation arena, to include policy, equipment, training, people, and programs.

"Visitors to the site will see the DoD perspective, as well as what the individual services and servicemembers are achieving in the transformation area," Heilsnis said. "There are so many interesting stories to tell in the broad category of transformation. This effort gives us a new venue for getting those stories to both our internal military and civilian audience and to the general public."

The transformation site is located at < <http://www.DoD.mil/transformation> > .

## AMERICAN FORCES PRESS SERVICE (DEC. 17, 2003) **NEW TECHNOLOGIES MAKE LIFE EASIER, SAFER FOR TROOPS ON THE BATTLEFIELD**

Paul Stone

**W**ASHINGTON—A Defense Department-led effort to quickly deliver new technologies to the warfighter is making life easier—and, more importantly, safer—for troops in Iraq and Afghanistan.

"Following the attacks of Sept. 11, we asked ourselves what we in the technical community could do to help," said Ronald Sega, DoD's director of research and engineering. Technology experts then worked with the Services, defense agencies, U.S. Central Command, and U.S. Special Operations Command, he added, to identify their priorities for the war on terrorism.

Sega said that two days after a Sept. 19, 2001, meeting with technology and warfighting experts, they had quickly identified 150 possible projects, which were then narrowed down to those that would make the biggest difference on the battlefield.

"For example, on Sept. 21, 2001, knowing that we would need an effective weapon for the mountains and caves of Afghanistan, we made the decision to go ahead with accelerating development of the thermobaric bomb," he said. "It was in basic chemistry by October. It was in a static test phase in November, and it was flight tested in December. So it was ready for fielding 90 days after we started, and it proved very effective."

Two other projects that were quickly accelerated included a phraselator and a water purification pen.

The phraselator is a paperback-book-sized device that gives non-linguist U.S. troops in Afghanistan and Iraq the ability to communicate with local citizens. Co-developed by the Defense Advanced Research Projects Agency and private contractors, the phraselator uses computer chips to translate English phrases into as many as 30 foreign language equivalents.

Users either speak into the device, which translates the English into the foreign-equivalent phrase, or they can punch a button to call up the desired phrase.

The water purification pen—the size of a miniature flashlight—allows servicemembers to take a local source of water and purify it for drinking.

"Each application of the pen can purify roughly two liters of water, with a total use of roughly 300 liters before it has to be replaced," Sega explained. "It was very popular in Afghanistan, so we accelerated its production for Iraq as well."

More recently, Sega said his office has focused heavily on force protection in Iraq. After consulting with the Services and CENTCOM, he said they concluded that the biggest priority was rushing more armor for humvees and interceptor body armor to the field, which is on track for delivery to warfighters this month.

He said that that armor for humvees provides increased protection for teams patrolling the streets in Iraq, while the interceptor body armor provides better protection



A U.S. Special Forces soldier uses the phraselator device with the debriefing module to determine where enemies have gone, and where weapons and explosives are stored in Iraq during Operation Iraqi Freedom.

DoD Photo

for those on foot patrols, and for all warfighters in general. Indeed, Sega said, the interceptor body armor has repeatedly proven its worth by saving literally dozens and dozens of lives in Iraq.

The body armor is equipped with removable throat and groin protectors, as well as front and back removable plates, which can stop 7.62 mm rounds. It weighs 16.4 pounds; each of the two inserts weighs 4 pounds, and the outer tactical vest weighs 8.4 pounds. Previously issued body armor—the flak jacket—weighed 25.1 pounds and didn't provide the same level of protection.

"The force-protection initiative resulted in other technical options, but what we chose to accelerate was based on input from the field," Sega said. "So when we end up prioritizing items, the warfighter has a big role."

Looking ahead, Sega said warfighters will see increased numbers of counter-mortar radar systems and increased numbers of unmanned aerial vehicles, which have recently been accelerated into production.

"We feel it's very important in the research and engineering community to be looking at ways we can improve the technical capabilities and the tools for the warfighter in the field," Sega said, "and we will continue to do that to enable those who are actually doing the fighting in the global war on terrorism to have the very best we can provide."

### AIR FORCE PRINT NEWS (DEC. 17, 2003) AF IDENTIFIES OPERATIONAL SHORTFALLS

**W**ASHINGTON (AFPN)—Air Force officials released a list of operational shortfalls Dec. 17. The list came from a two-year analysis of current and future warfighting effects and capabilities, a process called a capabilities review and risk assessment.

The assessment identified and prioritized critical operational shortfalls in such areas as:

- Global information grid. There is a need for a globally interconnected capability that collects, processes, stores, disseminates, and manages information on demand to warfighters, policy makers, and support people.
- Battlespace management. There is a need to implement effects-based planning and provide a common operational picture to the warfighter.

- Fleeting and mobile targets. There is a need to reduce the time needed to find, fix, track, and target hostile forces.
- Battle-damage assessment. There is a need for a toolkit and clarified definitions for commanders to determine effects-based decisions across the battlespace.
- Base defense. There is a need to clarify roles and responsibilities between the Air Force and sister Services.
- Cargo airlift. There is a need for a study to review requirements and prepare for possible force-structure changes.

"These are some of the key examples on a corporate list of 50 prioritized capability areas," said Brig. Gen. Stephen Goldfein, director of operational capability requirements. "These priorities present the most significant and immediate Air Force-wide capability objectives."

The assessment, a transition from the old quarterly acquisition program review, is a new review process across six Air Force chief of staff-directed concept of operations areas. The areas include: global strike, global response, homeland security, global mobility, nuclear response, and space and command, control, communications, computers, intelligence, surveillance and reconnaissance.

"This (assessment) will directly impact future Air Force investment strategy through the planning, programming, budgeting, and execution process," Goldfein said.

The Air Force will continue to operationalize capabilities-based planning, both internally and within the joint community.

"This effort will assist these organizations to optimize each Service's role as capabilities are developed for joint application," Goldfein said. "In the next two to three years, we'll work to infuse a 'capability-based culture' into (Department of Defense), joint and Air Force planning. The key to this process is to change from a threat-based, system-by-system requirements process toward an analysis methodology focusing on capability versus individual weapons systems or programs."



## DEPARTMENT OF DEFENSE NEWS RELEASE (DEC. 17, 2003) ADDITIONAL STRYKER BRIGADE ACQUISITIONS APPROVED

**T**he Department of Defense approved plans for the Army to field six Stryker Brigade Combat Teams (SBCT). Secretary of Defense Donald Rumsfeld approved an Army enhancement plan on Dec. 8 that provides for the acquisition of SBCTs 5 and 6. The Army's plan focused on enhancing the aviation, fire support, network, and sensor capability of SBCTs 5 and 6, and retrofitting brigades 1 through 4 with newer technology as it becomes available. The approval gives the Army permission to begin expending funds for the new brigades' acquisition and fielding.

Rumsfeld directed the Army to prepare the plan in a December 2002. The memorandum approved SBCTs 1 through 4, but directed further study of SBCTs 5 and 6 before the Army would receive final approval to field them.

Additionally, the plan reviewed basing options for the brigades and the desirability of associating Stryker brigades with Air Force aerial expeditionary forces to facilitate development of joint doctrine, training, and deployment.

The fifth SBCT, scheduled for fielding in 2006, will be in the 2d Brigade, 25th Infantry Division (Light) at Schofield Barracks, Hawaii. The sixth SBCT, scheduled for fielding from 2008–2010, will be the 56th Brigade (Mechanized), 28th Infantry Division (Mechanized), of the Pennsylvania Army National Guard.

## AIR COMBAT COMMAND NEWS SERVICE (DEC. 19, 2003) B-2 REACHES FULL OPERATIONAL CAPABILITY

*Senior Airman Shawn Clements, USAF*

**W**HITEMAN AIR FORCE BASE, Mo.—The B-2 Spirit reached full operational capability status, Lt. Gen. Bruce Carlson announced Dec. 17 during a ceremony here. The event was marked by the Spirit of Missouri's re-enactment of its first delivery here 10 years ago.

"The B-2 Spirit is combat-proven. It's now officially fully operational," said Carlson, 8<sup>th</sup> Air Force commander. "It does everything we wanted it to—and then some."

The capability status is the ultimate milestone in the development of any new weapon system, signifying ful-

fillment of the original requirements for the equipment, officials said.

"As we've heard, during the 10-year journey to fully operational capability status, the B-2 Spirit flew and fought in three major theater conflicts," Carlson said.

Deploying the aircraft forward for Operation Iraqi Freedom showed the full development of the B-2 team, Carlson said.

"The B-2 shelters, along with a sophisticated sustainment system, made that possible," he said. "Those shelters provided the critical support needed to maintain them. Thanks to all of you here who helped turn this requirement into a reality."

The latest chapter in the history of this base and the history of military aviation began with the arrival of the B-2, said U.S. Congressman Ike Skelton.

"The B-2 changed the calculation of the number of planes per target to the number of targets per plane," Skelton said.

*(Airman 1st Class Nick Martin contributed to this report.)*

## AMERICAN FORCES PRESS SERVICE (DEC. 22, 2003) FALCON PHASE 1 CONTRACTORS SELECTED

*K.L. Vantran*

**W**ASHINGTON—Nine contractors have begun work to place a small satellite or other payload weighing about 1,000 pounds into a low Earth orbit.

The project is part of the Force Application and Launch from the Continental United States, or FALCON, program. Task 1, Phase 1 on the small launch vehicle includes developing conceptual designs, performance predictions, cost objectives, and development and demonstration plans.

Three more contractors have also begun work on the phase's Task 2, hypersonic weapon systems. This includes the common aero vehicle (CAV), the enhanced common aero vehicle (ECAV), and the hypersonic cruise vehicle (HCV).

The CAV will be an unpowered, maneuverable, hypersonic glide vehicle capable of carrying about 1,000 pounds of munitions with a range of about 3,000 nautical miles. The ECAV will offer greater range and im-



A Hypersonic Cruise Vehicle capable of taking off from a conventional military runway and striking targets as far as 9,000 miles away is one of three aerial vehicles under conceptual development under the Defense Advanced Research Project Agency's FALCON initiative.

Image courtesy DARPA

proved maneuverability. The reusable HCV will be an independent aircraft capable of taking off from a conventional military runway and striking targets as far as 9,000 nautical miles away in less than two hours.

The goal of the joint Defense Advanced Research Projects Agency (DARPA) and Air Force program is to develop and validate in-flight technologies that will enable both a near-term (circa 2010) and far-term (circa 2025) capability to execute time-critical, prompt global-reach missions, while at the same time demonstrating affordable and responsive space lift, according to DARPA officials.

Task 1 contractors will receive between \$350,000 and \$540,000 each for their Phase I effort. Task 2 contractors will receive between \$1.2 million and \$1.5 million each. Subject to successful negotiations, each contractor will conduct a six-month system definition study within its respective task, said DARPA officials. At the end of Phase 1, DARPA and Air Force personnel will decide whether to proceed with Phase 2, a 36-month design and development effort.

## AMERICAN FORCES PRESS SERVICE (DEC. 23, 2003) **AGILE TRANSPORTATION FOR THE 21ST CENTURY TO IMPROVE TROOP, SUPPLY MOVEMENT**

K.L. Vantran

**W**ASHINGTON—Troops in the field could reap the benefits of U.S. Transportation Command's information technology initiative, *Agile Transportation for the 21<sup>st</sup> Century*—known as

AT21—as early as May, according to the command's director of operations.

TRANSCOM's mission is to move military supplies, equipment, and people around the world safely and efficiently.

"The concept for AT21 is as old as this command," said Army Maj. Gen. Robert T. Dail. "It embodies many of the technological capabilities required to more rapidly and efficiently move America's military and cargo. It's not only historic, but transformational."

In developing the \$38.9 million program, the general said, the command studied commercial partners and how they embraced supply chain management and distribution execution technologies.

"We have adopted many of these technologies and processes to help us manage the Defense Transportation System," he said. "The focus of the Advanced Concept Technology Demonstration is the development and integration of tools that can help us quickly develop optimal transportation plans for rapidly emerging and changing requirements. These processes will ultimately determine the best method for moving cargo and passengers to points around the globe."

Dail said the vision is to have a single point via the World Wide Web or by phone for DTS customers to request transportation.

Under AT21, the command will consolidate requests into a centralized requirements database, the general said. The database, he continued, would provide cus-

customer relationship management data, customer profiles and customer analytics, which will, ultimately, help the command better serve its customers.

This information will go to a scheduling engine that will help build a strategic distribution plan for moving units and their support worldwide, said Dail. The AT21 solution considers such constraints as weather, routing restrictions, diplomatic clearances, and transportation infrastructure.

One AT21 objective, said the general, is to create a new delivery schedule within 10 minutes of receiving a movement request.

The operations director said today's distribution pipeline often is jammed with unnecessary material that was requested due to the uncertainties of planning or capability to deliver.

"AT21 will improve reliability in delivering troops and sustainment to the regional combatant commander's area of responsibility," said Dail. "The troops on the front line will receive troop and sustainment support more effectively and have more visibility of delivery methods and timelines."

## AMERICAN FORCES PRESS SERVICE (DEC. 24, 2003) **DOD BUDGET REFORMS AID RELATIONSHIPS WITH PRIVATE SECTOR**

*Paul Stone*

**W**ASHINGTON—Transformation of DoD budgetary practices during the past few years is having a rippling effect, reaching far outside the Pentagon and positively influencing how private industry views working with the Defense Department.

That's the assessment of Dov Zakheim, DoD's undersecretary of defense (comptroller) and chief financial officer.

Zakheim, one of the chief architects in the effort to transform DoD budgetary practices, said in a recent interview that private industry—including both established defense contractors and those with whom the department has not traditionally conducted business—now view DoD as a more attractive business partner.

He credits this primarily to changes in the way that DoD programs funding and how it looks at its budget.

Zakheim said the first step he took upon taking office was to streamline the budget process and provide a "degree of consistency that wasn't there before." He explained that the budget process basically was broken down into two parts: the program review, performed by the Office of the Director of Program Analysis and Evaluation, and the budget review, performed by Zakheim's office—two processes that were more independent than integrated at the time.

"The program review traditionally looked at programs—did you want to buy an F-16, as opposed to an F-18, as opposed to an aircraft carrier—and they were decisions made in the summer prior to the start of the new fiscal year," Zakheim explained. "What then happened was we would review the actual budget proposals, and those who didn't get what they wanted in the program review looked at the budget review as a vehicle for overturning prior decisions. And in many cases, that happened. The two reviews did not share a common database, nor did they harmoniously integrate the people who were managing each of the reviews."

Today, all that has changed. Zakheim said that during the past year, the two staffs have become fully integrated, working hand-in-hand to ensure that what happens during the program review does not change in the budget review. "We simply issue a document that confirms, in budgetary terms, the decisions made in programmatic terms," he said.

Another significant change is Zakheim's initiative to examine the budget from a two-year perspective. "This has allowed us to make a commitment not to tamper with financial resources from one year to the next," he explained. "So in effect, what we're doing is carrying forward the full vision of transformation that really began last year."

What this means for those who do business with DoD, Zakheim said, is it gives them an increased sense of security that what DoD commits to invest in one year will not disappear the next. "Industries are always concerned about planning stability," he said. "Corporate planners want to know what their orders will look like next year and the year after that. And by incorporating that (long-term) view into our practices, by minimizing changes, and by building on previous (budgetary) decisions, we're giving industry a better sense of where we're going."

Zakheim used the shipbuilding industry as an example. "Each year we promised that the following year (we) would do something more with shipbuilding. And it's

not unfair to say that the shipbuilding account is more stable than it has been in years," he said. "That's important, because it's a volatile industry in which people move out very quickly if they don't see jobs. They go elsewhere and don't come back. And it's extremely hard and costly to get started back up again."

Transformation of budget practices is also attracting business outside of the traditional defense firms, and Zakheim credits that, in part, to integration of some corporate practices in the DoD budget process.

"My emphasis on having clean audits—financial statements that make sense to the outside world—I believe is helpful," he said. "It shows them that we understand how they do business and it helps them understand us."

As a result, Zakheim said that increasingly more businesses from the high-tech sector are showing interest in doing business with DoD, especially as they recognize how much the department now relies on information-based technologies.

"My colleagues in acquisition and technology have also tried very hard to create a more company-friendly environment so we can attract the leading edge of American business," he said. "And we believe that has begun to occur."

## ARMY AND LEAD SYSTEMS INTEGRATOR TEAM SIGN MAJOR AGREEMENT FOR FUTURE COMBAT SYSTEMS WAY AHEAD (DEC. 11, 2003)

**T**he Army and Future Combat Systems (FCS) Lead Systems Integrator (LSI) team of Boeing-Science Applications International Corporation (SAIC) formalized their baseline plan yesterday for the execution of the FCS Systems Development and Demonstration (SDD) phase by definitizing the Other Transactions Agreement (OTA) signed on May 30, 2003.

Definitization means the contracting parties, represented by the U.S. Army Tank-Automotive and Armaments Command and Boeing, have reached agreement on more precisely defined provisions relative to the scope, schedule, and price for SDD performance.

The definitized Agreement describes efforts to be completed and establishes an upper limit of \$14.78 billion with funds incrementally obligated through FY 2011. By signing this definitized Agreement, the government com-

mits to plan for and provide funding in accordance with the execution schedule. The definitized agreement limits government liability to the amount obligated each year and termination costs, if applicable.

"This is an important step forward toward the Army's Future Force," said Lt. Gen. Joseph Yakovac, Military Deputy to the Assistant Secretary of the Army for Acquisition, Logistics and Technology. "We will now begin to integrate ongoing systems and sub-systems design and development activity into the integrated whole that will be the FCS-equipped Unit of Action.

"The Army-LSI team has worked very hard together to agree on this framework. By this definitizing action, we are taking another major step forward in realizing a key Army Transformation objective. The Army remains satisfied with the LSI's major partner source-selection process from this past summer, and we are confident that we're on the right path," said Yakovac.

During this SDD phase, The Army-LSI team will work with the 23 FCS partners, chosen through an Army-approved competitive process over the summer, to begin the design and development of the first FCS increment.

FCS is a joint, networked-centered "system of systems" that is focused to support the nation's most important system—The Soldier—to give them unprecedented situational awareness that will allow them to see first, understand first, act first, and finish decisively.

FCS is composed of The Soldier, supported by an advanced communications and digital information network that connects 18 manned and unmanned ground and aerial vehicles and sensors and munitions. The FCS program will, over time, replace the majority of units in the Army with 'units of action' equipped with a new family of manned and unmanned ground vehicles and aerial vehicles.

Part of what makes FCS transformational is its adherence to the new DoD Evolutionary Acquisition model of Spiral Development, which allows developers to insert emerging technology as the systems mature over time. Also, the ability to interface with other military services, governmental agencies, and multi-national partners has been built into the FCS network from the ground up, making the system more relevant to regional combatant commanders.



## HEADQUARTERS MARINE CORPS (RELEASED JAN. 5, 2004) LATEST VERSION OF MARINE CORPS' AMPHIBIOUS FIGHTING VEHICLES GOES FARTHER, FASTER

Staff Sgt. Cindy Fisher, USMC

**W**OODBRIDGE, Va. (October 2003)—The Marine Corps' newest expeditionary asset is the latest in a series of vehicles that began with the Roebeling Alligator in 1932. The new vehicle, formerly known as the Advanced Amphibious Assault Vehicle, was recently renamed the Expeditionary Fighting Vehicle (EFV).

In the 20<sup>th</sup> century, the Corps' focus was on amphibious operations, but the 21<sup>st</sup> century focus is shifting to expeditionary operations, said Lt. Gen. Emil R. Bedard, the Deputy Commandant for Plans, Policies, and Operations, Headquarters, Marine Corps, during his speech at the renaming ceremony at the Worth Avenue Technology Center in Woodbridge, Va., Sept. 10. Changing the name of the vehicle reflects this cultural change in the Marine Corps' warfighting concepts.

In other words, "a rose by any other name would still smell like burnt oil and diesel fuel," according to Col. Clayton F. Nans, the direct reporting program manager at the technology center. Nans added that this vehicle,

which is unique to the Marine Corps, has seen a lot of improvements from the original design and better complements the expeditionary nature of the Corps' current warfighting concepts.

The EFV, along with the MV-22 Osprey and the Landing Craft Air-Cushioned, are the future of Marine Corps warfighting, said Lt. Gen. Bedard. "It is about being able to go where we want to go and to be able to go as deep and fast as we need to. (The EFV) is the vehicle that will take us from farther out to sea, to deeper into the heart of the enemy."

The predecessor to the EFV, the Amphibious Assault Vehicle (AAV), has been in service for almost 40 years. The vehicle, which was originally fielded in 1972, has been overhauled and upgraded numerous times throughout its career, but a 1988 Mission Area Analysis determined that it was deficient to meet the Corps' needs in areas such as water and land speed, firepower, armor protection, and system survivability.

"The Marine Corps has always been an expeditionary force," said Charles M. Hall, president of General Dynamics Land Systems, which was awarded the contract to develop and demonstrate the vehicle in February 2001. "This new vehicle's capabilities must surpass pre-



Marines and General Dynamics Amphibious Systems technicians put the Expeditionary Fighting Vehicle (EFV) through rigorous testing to ensure it will meet the requirements mandated by the Marine Corps. The Marine Corps is slated to purchase a total of 1,013 EFVs at a total cost of about 6.7 billion. The first EFVs are expected to be fielded beginning in 2008.

Photo courtesy General Dynamics Amphibious Systems



The Advanced Assault Amphibious Vehicle was renamed the Expeditionary Fighting Vehicle in a ceremony at the Worth Avenue Technology Center in Woodbridge, Va., Sept. 10. The christening of the vehicle reflected both Navy and Marine Corps traditions. To honor the past and look to the future, retired Maj. J.T. Rutherford, a veteran of World War II and four-time representative from Texas, and Lance Cpls. Edward J. Castleberry and Kenneth D. Koonce, both veterans of Operation Iraqi Freedom, christened the vehicle. In keeping with naval tradition, two bottles of water were broken against the ship; the water from one bottle coming from the Pacific Ocean, and the other from the Atlantic Ocean. Photo by Staff Sgt. Cindy Fisher, USMC

vious amphibious vehicles so the Marine Corps can continue to exploit the sea and the land.”

The EFV will exceed the requirements set forth by the Marine Corps, Hall said. “We have demonstrated most of those requirements. The EFV will provide the capabilities necessary for the 21st century Marine.”

The vehicle is expected to exceed the water speed of the AAV by three times; have a land mobility equal to or greater than an M1A1 tank; have increased survivability features over the AAV; provide command and control capabilities to subordinate, adjacent, and higher units; and provide nuclear, biological, and chemical protection for its crew and accompanying troops.

Lance Cpls. Edward J. Castleberry and Kenneth D. Koonce, both AAV operators and veterans of Operation Iraqi Freedom, recently had a chance to put the EFV through some of its paces.

“It’s awesome, absolutely years and years more advanced than what we have now,” said Castleberry, a crew chief with 2<sup>nd</sup> Amphibious Assault Battalion out of Marine Corps Base Camp Lejuene, N.C.

“It is way better than the one we have right now—a lot more firepower and speed,” added Koonce, an AAV crewman based at Marine Corps Base Camp Pendleton, Calif.

“EFV is much more than an Amphibious Assault Vehicle and truly represents a transformational leap in technology and capability beyond any previous Assault Am-

phibian. EFV will be one of the most capable and advanced fighting vehicles ever fielded,” said Gen. Michael W. Hagee, Commandant of the Marine Corps, in a letter to the direct reporting program manager of the EFV program.

The EFV program entered the system development and demonstration phase of the acquisition cycle in December 2000. Since receiving the SSD contract, General Dynamics Land Systems subsidiary, General Dynamics Amphibious Systems has been fabricating and testing the second generation of the vehicle. They have completed three and will build a total of nine of the second generation prototypes and one live-fire test vehicle at the Worth Center facility. They will also develop the low-rate initial production design.

Looking ahead, General Dynamics Amphibious Systems expects to enter into operational assessments in fiscal year 05, according to Hall. Extensive testing of the reliability, survivability, and capabilities of the prototype vehicles will continue throughout the SSD phase.

This is a long-term program and a third generation of the EFV will be developed before it is fielded, said Nans. “We expect to begin fielding the EFV in fiscal year 2008.”

Currently, a total of 1,013—935 EFVP, for personnel, and 78 EFVC, command vehicles—are scheduled to be built and delivered through fiscal year 2018. General Dynamics has selected a Prince William County facility for production of the EFV.